

COC# 120

11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

(425) 420-9200 (509) 924-9200 (503) 906-9200

(541) 383-9310 FAX 382-7588

FAX 420-9210

924-9290

Fax 906-9210

CHAIN OF CUSTODY REPORT

Work Order #: M 106084

									1											
CLIENT: BRISTOL							ICE TO						6			TURN	NAROUNI	O REQUEST in	Business D	ays*
REPORT TO: ANNE	KRANA	WETT	ER			BR	ST	01	approxima .									ic & Inorganic Ana		
ADDRESS: AMCHIT	KA ISLF	MD P	+K													10 7 STD.	7 5 Petrolei	um Hydrocarbon A	2 1	< 1
PHONE: 907.770 PROJECT NAME: AMCA	.0974	FAX: 7	70.	09	15	P.O. N	ÚMBE	R: 2	210	90							4	3 2	1 <1	
PROJECT NAME: AMC	HTKA								EDAN	ALYSES	3					ST	D.	Please Sp	ecify	
PROJECT NUMBER: 210	20	,		3													OTH	ER		
SAMPLED BY:	~ (4)	JLC		X-S												*Turnar	ound Requests	less than standard ma	ıy incur Rush Ch	arges.
CLIENT SAMPLE	SAMPLI	ING	DRO	MA											, i	MATRIX	# OF			NCA WO
IDENTIFICATION	DATE/T	IME	0	25												(W, S, O)	CONT.	COMME	ENTS	ID
10/AMB7075L	6/27/01	1105	X	X	,					,						5	-2			
201AMB708SL	6/27/01	0	X	X		, •								-		S	Z			
3.0/AMB709SL	6/27/01	1115	X	X				-	1							S	Z			
4.01AMB710SL	6/27/01	1120	X	X												S	2			
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RELINQUISHED BY: James O	Clark.	FIRM:	BRIS	STO	1		6/27			IVED BY	. Co	ng	ra	Or is B	rodl	e FIRM:	NCA	h		1311
RELINQUISHED BY:						DATE:			126	IVED BY									DATE:	
PRINT NAME:		FIRM:		-		TIME:			PRINT	NAME:						FIRM:			TIME:	
ADDITIONAL REMARKS:	BO TA	hlx F-	4 p.	FNIN	+													TEMP:	0	1 1



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Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

541.383.9310 fax 541.382.7588

6 December, 2001

Anne Kranawetter Bristol Environmental & Engineering 2000 W International Airport C#1 Anchorage, AK 99502-1116

RE: Amchitka

Enclosed are the results of analyses for samples received by the laboratory on 06/27/01 13:11. If you have any questions concerning this report, please feel free to contact me.

This report was recreated from a previously issued final report in order to provide an electronic copy. The final report used for these electronic copies may have been previously issued as an amended report due to client requested changes to sample names, etc. No data has changed since submission of the previously issued final, or amended, report.

Sincerely,

Stephen Wilson

Environmental Group Leader

1112

Work Orders included in this report:

M106084



Anchorage, AK 99502-1116

Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223

Reported:

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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Project Manager: Anne Kranawetter 06/29/01 00:06

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
01AMB707SL	M106084-01	Soil	06/27/01 11:05	06/27/01 13:11
01AMB708SL	M106084-02	Soil	06/27/01 11:10	06/27/01 13:11
01AMB709SL	M106084-03	Soil	06/27/01 11:15	06/27/01 13:11
01AMB710SL	M106084-04	Soil	06/27/01 11:20	06/27/01 13:11

North Creek Analytical - Mobile Lab



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Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka
Project Number: 21090

Reported:

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

06/29/01 00:06

Diesel Hydrocarbons (C10-C25) per AK102 North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMB707SL (M106084-01) Soil					Sampled: 06	/27/01 Rece	eived: 06/27/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	06/27/01	06/28/01	0106096	
Surr: 1-Chlorooctadecane	93.1 %	50-150							
Surr: Triacontane	102 %	50-150							
01AMB708SL (M106084-02) Soil					Sampled: 06	/27/01 Rece	eived: 06/27/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	06/27/01	06/28/01	0106096	
Surr: 1-Chlorooctadecane	86.1 %	50-150							
Surr: Triacontane	94.9 %	50-150							
01AMB709SL (M106084-03) Soil					Sampled: 06	/27/01 Rece	eived: 06/27/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	06/27/01	06/28/01	0106096	
Surr: 1-Chlorooctadecane	99.6 %	50-150							
Surr: Triacontane	106 %	50-150							
01AMB710SL (M106084-04) Soil					Sampled: 06	/27/01 Rece	eived: 06/27/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	06/27/01	06/28/01	0106096	
Surr: 1-Chlorooctadecane	91.3 %	50-150							
Surr: Triacontane	99.3 %	50-150							

North Creek Analytical - Mobile Lab

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Bristol Environmental & Engineering 2000 W International Airport C#1

Project Number: 21090

Reported:

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

Project: Amchitka

06/29/01 00:06

BTEX,MTBE and Naphthalene per EPA Method 8021B North Creek Analytical - Mobile Lab

		Reporting							
Analyte	Result	Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMB707SL (M106084-01) Soil					Sampled: 06	/27/01 Rece	eived: 06/27/	01	
Benzene	ND	0.0425	mg/kg dry	50	!1B BTEX/M	Π 06/28/01	06/28/01	0106100	
Toluene	ND	0.170	"	"	"	"	"	"	
Ethylbenzene	ND	0.170	"	"	"	"	"	"	
Xylenes (total)	ND	0.340	"	"	"	"	"	"	
Naphthalene	ND	1.70	"	"	"	"	"	"	A-01
Surr: 4-BFB	83.3 %	50-150							
01AMB708SL (M106084-02) Soil					Sampled: 06	/27/01 Rece	eived: 06/27/	01	
Benzene	ND	0.0399	mg/kg dry	50	!1B BTEX/M	ΓΙ 06/28/01	06/28/01	0106100	
Toluene	ND	0.160	"	"	"	"	"	"	
Ethylbenzene	ND	0.160	"	"	"	"	"	"	
Xylenes (total)	ND	0.319	"	"	"	"	"	"	
Naphthalene	ND	1.60	"	"	"	"	"	"	A-01
Surr: 4-BFB	86.5 %	50-150							
01AMB709SL (M106084-03) Soil					Sampled: 06	/27/01 Rece	eived: 06/27/	01	
Benzene	ND	0.0378	mg/kg dry	50	!1B BTEX/M	ΓΙ 06/28/01	06/28/01	0106100	
Toluene	ND	0.151	"	"	"	"	"	"	
Ethylbenzene	ND	0.151	"	"	"	"	"	"	
Xylenes (total)	ND	0.302	"	"	"	"	"	"	
Naphthalene	ND	1.51	"	"	"	"	"	"	A-01
Surr: 4-BFB	86.8 %	50-150							
01AMB710SL (M106084-04) Soil					Sampled: 06	/27/01 Rece	eived: 06/27/	01	
Benzene	ND	0.0337	mg/kg dry	50	!1B BTEX/MT	ΓΙ 06/28/01	06/28/01	0106100	
Toluene	ND	0.135	"	"	"	"	"	"	
Ethylbenzene	ND	0.135	"	"	"	"	"	"	
Xylenes (total)	ND	0.269	"	"	"	"	"	"	
Naphthalene	ND	1.35	"	"	"	"	"	"	A-01
Surr: 4-BFB	85.4 %	50-150							

North Creek Analytical - Mobile Lab



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Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka
Project Number: 21090

Reported:

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

06/29/01 00:06

Physical Parameters per APHA/ASTM/EPA Methods North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit Units	Dilution	Method Prepared Analyzed Batch	Notes
01AMB707SL (M106084-01) Soil				Sampled: 06/27/01 Received: 06/27/01	
% Solids	78.9	0.0100 % by Weigh	nt 1	Gravimetric 06/27/01 06/28/01 010609	07
01AMB708SL (M106084-02) Soil				Sampled: 06/27/01 Received: 06/27/01	
% Solids	85.5	0.0100 % by Weigh	nt 1	Gravimetric 06/27/01 06/28/01 010609	07
01AMB709SL (M106084-03) Soil				Sampled: 06/27/01 Received: 06/27/01	
% Solids	88.8	0.0100 % by Weigh	nt 1	Gravimetric 06/27/01 06/28/01 010609	97
01AMB710SL (M106084-04) Soil				Sampled: 06/27/01 Received: 06/27/01	
% Solids	84.6	0.0100 % by Weigh	nt 1	Gravimetric 06/27/01 06/28/01 010609	97

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Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka
Project Number: 21090

Reported: 06/29/01 00:06

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

Diesel Hydrocarbons (C10-C25) per AK102 - Quality Control

North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Ratch 0106096 - 3545 ASE										

Blank (0106096-BLK1)		Prepared & Analyzed: 06/27/01							
Diesel Range Organics	ND	150 mg/kg wet							
Surr: 1-Chlorooctadecane	21.0	"	23.4		89.7	50-150			
Surr: Triacontane	20.3	"	23.4		86.8	50-150			
LCS (0106096-BS1)			Prepared	d & Analy	zed: 06/2	27/01			
Diesel Range Organics	1310	150 mg/kg wet	1250		105	75-125			
Surr: 1-Chlorooctadecane	21.5	"	23.4		91.9	50-150			
Surr: Triacontane	20.9	"	23.4		89.3	50-150			
LCS Dup (0106096-BSD1)			Prepared & Analyzed: 06/27/01						
Diesel Range Organics	1260	150 mg/kg wet	1250		101	75-125	3.89	20	
Surr: 1-Chlorooctadecane	26.3	"	23.4		112	50-150			
Surr: Triacontane	21.0	"	23.4		89.7	50-150			
Matrix Spike (0106096-MS1)	Sour	ce: M106082-08	Prepared	d & Analy	zed: 06/2	27/01			
Diesel Range Organics	1240	150 mg/kg dry	1590	ND	78.0	60-140		<u></u>	
Surr: 1-Chlorooctadecane	32.2	"	29.8		108	50-150			
Surr: Triacontane	25.9	"	29.8		86.9	50-150			

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Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka Project Number: 21090

Reported:

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

06/29/01 00:06

BTEX,MTBE and Naphthalene per EPA Method 8021B - Quality Control

North Creek Analytical - Mobile Lab

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Blank (0106100-BLK1)				Prepared &	Analyzed: 06/2	8/01
Benzene	ND	0.0250 n	ng/kg wet	Trepared & A	maryzea. 00/2	0, 01
Toluene	ND	0.100	"			
Ethylbenzene	ND	0.100	"			
Xylenes (total)	ND	0.200	"			
Naphthalene	ND	1.00	"			
Surr: 4-BFB	2.50		"	2.50	100	50-150
LCS (0106100-BS1)				Prepared &	Analyzed: 06/2	8/01
Benzene	2.09	0.0250 n	ng/kg wet	2.50	83.6	69-138
Toluene	2.29	0.100	"	2.50	91.6	53-151
Ethylbenzene	2.62	0.100	"	2.50	105	61-141
Xylenes (total)	7.33	0.200	"	7.50	97.7	62-141
Naphthalene	3.15	1.00	"	2.50	126	65-135
Surr: 4-BFB	2.65		"	2.50	106	50-150

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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Project Manager: Anne Kranawetter 06/29/01 00:06

Reported:

Notes and Definitions

A-01 Acceptance criteria for continuing calibration verification standard was exceeded high. Sample results are non-detect and are not

affected. DoD QSM Draft 5.9.4.2.E.1

DET Analyte DETECTED

Anchorage, AK 99502-1116

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.

wet Sample results reported on a wet weight basis (as received)

RPD Relative Percent Difference

North Creek Analytical - Mobile Lab

Items for Project Manager Review

LabNumber	Analysis	Analyte	Exception
			Report recreated from:
			\\sisters\elmnt\Report\M106084 FINAL 06 29 01
			0006.mdb
			Default Report (not modified)
M106084-01	8021B BTEX/MTBE/N	Naphthalene	A-01
M106084-02	8021B BTEX/MTBE/N	Naphthalene	A-01
M106084-03	8021B BTEX/MTBE/N	Naphthalene	A-01
M106084-04	8021B BTEX/MTBE/N	Naphthalene	A-01